



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,399	12/27/2001	Jae Doeg Lim	SAMS01-00162	1210

7590

07/22/2004

Docket Clerk
P.O. Drawer 800889
Dallas, TX 75380

EXAMINER

EWART, JAMES D

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 07/22/2004

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,399

Applicant(s)

LIM, JAE DOEG

Examiner

James D Ewart

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1,2,11,12,16 and 17 are rejected under 35 U.S.C. 103(a) as being anticipated by Fong et al. (U.S. Patent No. 6,069,885).

Referring to claim 1, 11 and 16, Fong et al teaches for use in a wireless communication network comprising at least one base station and a plurality of mobile stations (Column 5, Lines 30-33), an apparatus for providing concurrent data transmissions from said base station to said plurality of mobile stations (Column 4, Lines 51-60), said apparatus comprising: a register unit in a base transceiver station of said base station, said register unit (Column 5, Lines 47-55) capable of causing data packets (Column 6, Lines 10-11) of a first data call to be concurrently transmitted during at least one subframe of a data frame comprising N subframes (Column 6, Lines 58-65 and Figure 5).

Referring to claim 2, 12 and 17, Fong et al further teaches wherein said register unit is capable of causing data packets of a second data call to be transmitted during at least one subframe of said data frame comprising N subframes other than said subframe used by said first data call Column 7, Lines 45-54).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 13 and 18 are rejected under 35 USC 103(a) as being unpatentable over Fong et al. in view of Diachina et al. (U.S. Patent Publication No. 2002/0163906)

Referring to claims 3, 13 and 18, Fong et al teaches the limitations of claims 3, 13 and 18, but does not teach wherein said data packets comprise an emergency message. Diachina et al. teaches wherein said data packets comprise an emergency message (0033). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. with the teaching of Diachina et al. wherein said data packets comprise an emergency message to reduce the time of contacting an emergency service (0004,0005).

3. Claims 4, 5, 14, 15, 19 and 20 are rejected under 35 USC 103(a) as being unpatentable over Fong et al. in view of Leung et al. (U.S. Patent No. 6,262,980) and further in view of Chung et al. (U.S. Patent Publication No. 2002/0151310)

Referring to claims 4, 14 and 19, Fong et al teaches wherein said register unit is capable of causing data packets of a first data call to be concurrently transmitted during a first subframe

of a data frame comprising 2 subframes (Figure 5), but does not teach setting the number of subframes equal to the number of sectors. Leung et al. teaches setting the number of subframes equal to the number of sectors (Figure 2). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. with the teaching of Leung et al. of setting the number of subframes equal to the number of sectors to avoid interference between the sectors and cells (Column 5, Lines 36-37). Fong et al. and Leung et al. teach the limitations of claim 4, but do not teach wherein the number of sectors is equal to three. Chung et al teaches wherein the number of sectors is equal to three (Figure 1). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. and Leung et al. with the teaching of Chung et al wherein the number of sectors is equal to three (Figure 1) to manage the distribution of calls (0015) in a large geographic area (0004).

Referring to claims 5, 15 and 20, Leung et al further teaches wherein said register unit is capable of causing data packets of a second data call to be transmitted during one of: a second subframe of said data frame and a third subframe of said data frame (Figure 5). Examiner interprets the packet flow shown in figure 5 with low traffic and a mobile device has packets to be received by the second data call thus sending in a second and third subframe.

4. Claims 6 is rejected under 35 USC 103(a) as being unpatentable over Fong et al., Leung et al. and Chung et al. and further in view of Diachina et al.

Referring to claim 6, Fong et al, Leung et al and Chung et al teaches the limitations of claim 3, but does not teach wherein said data packets comprise an emergency message. Diachina et al. teaches wherein said data packets comprise an emergency message (0033). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al., Leung et al and Chung et al with the teaching of Diachina et al. wherein said data packets comprise an emergency message to reduce the time of contacting an emergency service (0004,0005).

5. Claims 7-9 are rejected under 35 USC 103(a) as being unpatentable over Fong et al. and further in view of Yoshida et al. (U.S. Patent Publication No. 2002/0068588)

Referring to claim 7, Fong et al. teaches wherein said register unit comprises: a register main unit capable of receiving from said base transceiver station a plurality of data packets to be transmitted to a plurality of cell sectors (Column 5, Lines 47-55), and capable of identifying a cell sector destination for each of said plurality of data packets (Column 6, Lines 58-65); a register location unit coupled to said register main unit, said register location unit capable of providing to said register main unit information concerning said plurality of data packets (Column 5, Lines 47-55), but does not teach a plurality of buffers coupled to a main unit, each of said plurality of buffers associated with a cell sector, each of said buffers capable of receiving data packets from said main unit to be transmitted to a respective cell sector. Yoshida et al. teaches a plurality of buffers coupled to a main unit, each of said plurality of buffers associated with a cell sector, each of said buffers capable of receiving data packets from said main unit to be transmitted to a respective cell sector (0014,0015,0060,0061,0068 and Figure 1). Therefore at

the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. with the teaching of Yoshida et al. wherein a plurality of buffers coupled to a main unit, each of said plurality of buffers associated with a cell sector, each of said buffers capable of receiving data packets from said main unit to be transmitted to a respective cell sector to avoid buffer overflow (0011).

Referring to claim 8, Fong et al. further teaches a first data call that sends data packets in a subframe of a data frame comprising N subframes (Figure 5 and 7) and causing said portion of data packets of said first data call to be concurrently transmitted by an antenna (Figure 1, Column 4, Lines 51-60 and Column 6, Lines 16-17), but does not teach a plurality of buffers and storing data packets (Column 5, Lines 47-55). Yoshida et al. teaches the use of a plurality of buffers and storing data packets (0013). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. with the teaching of Yoshida et al. of using a plurality of buffers and storing data packets to avoid buffer overflow (0011).

Referring to claim 9, Yoshida et al. teaches wherein each buffer of said plurality of buffers is capable of storing a portion of data packets (0013).

6. Claim 10 is rejected under 35 USC 103(a) as being unpatentable over Fong et al. in view of Yoshida et al. in view of Leung et al and further in view of Chung et al.

Referring to claim 10, Fong et al teaches data frame comprises two subframes (Figure 5 also see Figure 7), but does not teach wherein a plurality of buffers comprises three buffers. Yoshida et al teaches wherein a plurality of buffers comprises three buffers (0063 and Figure 1; 112-114). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al with the teaching of Yoshida et al wherein a plurality of buffers comprises three buffers to avoid buffer overflow (0011). Fong et al. and Yoshida et al. teach the limitations of claim 10, but do not teach setting the number of subframes equal to the number of sectors. Leung et al. teaches setting the number of subframes equal to the number of sectors (Figure 2). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al. and Yoshida et al. with the teaching of Leung et al. of setting the number of subframes equal to the number of sectors to avoid interference between the sectors and cells (Column 5, Lines 36-37). Fong et al., Yoshida et al. and Leung et al. teach the limitations of claim 4, but do not teach wherein the number of sectors is equal to three. Chung et al teaches wherein the number of sectors is equal to three (Figure 1). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Fong et al., Yoshida et al and Leung et al. with the teaching of Chung et al wherein the number of sectors is equal to three (Figure 1) to manage the distribution of calls (0015) in a large geographic area (0004).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barany et al. U.S. Patent No. 6,584,084 discloses expanded carrier capacity in a mobile communications system.

Berger et al. U.S. Patent No. 6,426,814 discloses spatially switched router for wireless data packets.

Carson et al. U.S. Patent Publication No. 2002/0159449 discloses high speed multi-stage switching network formed from stacked switching layers.

Conner U.S. Patent No. 6,597,681 discloses time-based mapping of control channel bursts in a wireless communication network.

Eyuboglu et al. U.S. Patent Publication No. 2002/0196749 discloses radio network control.

Leung et al. U.S. Patent No. 6,400,697 discloses method and apparatus for sector based resource allocation in a broadband wireless communications system.

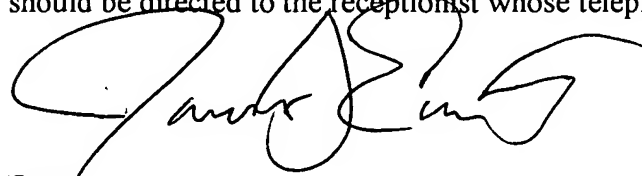
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D Ewart whose telephone number is (703) 305-4826. The examiner can normally be reached on M-F 7am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703)308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Application/Control Number: 10/034,399

Art Unit: 2683

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

A large, stylized handwritten signature in black ink, appearing to read 'Ewart'.

Ewart
July 14, 2004

A handwritten signature in black ink, appearing to read 'W. Trost'.

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600